SID

```
RESULT
AX026712
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            AX026712
                                      50 bp
                                               DNA
                                                       linear
                                                                PAT 16-SEP-2000
DEFINITION
            Sequence 14 from Patent W00039300.
ACCESSION
            AX026712
            AX026712.1 GI:10187879
VERSION
KEYWORDS
SOURCE
            synthetic construct.
            synthetic construct
  ORGANISM
            artificial sequence.
               (bases 1 to 50)
REFERENCE
            Archer, J.A. and Tuerck, J.A.
  AUTHORS
            Control of gene expression in eukaryotes
  TITLE
            Patent: WO 0039300-A 14 06-JUL-2000;
  JOURNAL
            CAMBRIDGE ADVANCED TECH (GB)
                     Location/Qualifiers
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BASE COUNT
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                          18 c
                                             9 t
                                    9 g
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            28; Conservative
 Matches
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                                                       Indels
                                                                 0; Gaps
                                                                             0;
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QУ
          1 TCCACTGACGTAAGGGATGACGCACAAT 28
Db
RESULT
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AR130348
LOCUS
            AR130348
                                      98 bp
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                                                                PAT 16-MAY-2001
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DEFINITION
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ACCESSION
            AR130348
VERSION
            AR130348.1 GI:14118245
KEYWORDS
SOURCE
            Unknown.
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           Unknown.
            Unclassified.
REFERENCE
            1 (bases 1 to 98)
            Ishige, F., Chua, N. and Oeda, K.
 AUTHORS
            Plant promoter comprising a G-box element, GCCACGTGCC or
  TITLE
            GCCACGTGAG, and an application thereof
           Patent: US 6187996-A 3 13-FEB-2001;
  JOURNAL
FEATURES
                    Location/Qualifiers
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                    /organism="unknown"
                         27 c
BASE COUNT
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 Query Match
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Best Local Similarity 100.0%; Pred. No. 0.067;

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                                                                   Gaps
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QУ
          Db
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RESULT
         4
E13108
                                     98 bp
LOCUS
            E13108
                                                     linear PAT 24-JUN-1998
                                             DNA
DEFINITION 35S promoter.
ACCESSION
            E13108
VERSION
            E13108.1 GI:3251920
KEYWORDS
            JP 1997131187-A/3.
SOURCE
            unidentified.
  ORGANISM unidentified
            unclassified.
REFERENCE
            1 (bases 1 to 98)
            Ishige, I., Chiyua, N. and Oita, K. .
  AUTHORS
  TITLE
            PLANT PROMOTER AND ITS UTILIZATION
            Patent: JP 1997131187-A 3 20-MAY-1997;
  JOURNAL
            SUMITOMO CHEM CO LTD
COMMENT
            OS
                Unknown
                JP 1997131187-A/3
            PN
            PD
                20-MAY-1997
            PF
                07-JUN-1996 JP 1996145492
                                    178730, 05-SEP-1995 JP 95P
            PR
                14-JUL-1995 JP 95P
                                                                 227967 PI
           ISHIGE IKUJI, CHIYUA NAMUUHAI, OITA KENJI
                C12N15/09,A01H5/00,C07H21/04,C12N5/10,(C12N5/10,C12R1:91); CC
           PC
             strandedness: Double;
                topology: Linear;
            CC
            FH
                Key
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QУ
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Db
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AR130349
LOCUS
           AR130349
                                   102 bp
                                             DNA
                                                     linear PAT 16-MAY-2001
DEFINITION Sequence 4 from patent US 6187996.
           AR130349
ACCESSION
```

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VERSION
           AR130349.1 GI:14118246
KEYWORDS
SOURCE
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           Unclassified.
REFERENCE
           1 (bases 1 to 102)
           Ishige, F., Chua, N. and Oeda, K.
  AUTHORS
           Plant promoter comprising a G-box element, GCCACGTGCC or
  TITLE
           GCCACGTGAG, and an application thereof
           Patent: US 6187996-A 4 13-FEB-2001;
  JOURNAL
FEATURES
                    Location/Qualifiers
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     source
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                         27 c
BASE COUNT
                28 a
                                  21 g
                                          26 t
ORIGIN
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  Best Local Similarity 100.0%; Pred. No. 0.067;
           28; Conservative
  Matches
                                                 0; Indels
                                                                   Gaps
                                0; Mismatches
                                                                           0;
Qу
       1 tccactgacgtaagggatgacgcacaat 28
         Db
        8 TCCACTGACGTAAGGGATGACGCACAAT 35
RESULT
AR130350/c
LOCUS
           AR130350
                                             DNA
                                    102 bp
                                                     linear
                                                              PAT 16-MAY-2001
DEFINITION Sequence 5 from patent US 6187996.
ACCESSION
           AR130350
VERSION
           AR130350.1 GI:14118247
KEYWORDS
           Unknown.
SOURCE
  ORGANISM Unknown.
           Unclassified.
REFERENCE
           1 (bases 1 to 102)
           Ishige, F., Chua, N. and Oeda, K.
 AUTHORS
           Plant promoter comprising a G-box element, GCCACGTGCC or
  TITLE
           GCCACGTGAG, and an application thereof
           Patent: US 6187996-A 5 13-FEB-2001;
  JOURNAL
                    Location/Qualifiers
FEATURES
                    1. .102
     source
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                                 28 g
                         20 c
BASE COUNT
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                                          28 t
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  Query Match
 Best Local Similarity 100.0%; Pred. No. 0.067;
                              0; Mismatches
 Matches
           28; Conservative
                                              0; Indels
                                                               0; Gaps
                                                                          0;
ΩУ
       1 tccactgacgtaagggatgacgcacaat 28
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Db

99 TCCACTGACGTAAGGGATGACGCACAAT 72

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RESULT
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ID
XX
AC
     AAQ12193;
XX
DT
                  (first entry)
     11-SEP-1991
XX
DE
     ASF-1 binding site from CaMV 35S wild-type promoter.
XX
KW
     Activation sequence factor 1; ASF-1; roots; ss.
XX
OS
     Cauliflower mosaic virus.
XX
FH
                     Location/Qualifiers
     Key
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FT
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FT
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FT
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                     9..13
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XX
PN
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XX
PD
     11-JUN-1991.
XX
PF
     14-NOV-1988;
                    88US-0272169.
XX
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                   88US-0272169.
PR
XX
PA
     (LAME/) LAM E.
XX
PI.
     Lam E, Benfey PN, Gilmartin PM, Chua NH;
XX
     WPI; 1991-192554/26.
\mathsf{DR}
XX
PT
     Nucleotide promoter sequence improving gene expression in roots -
PT
     is binding site for activation sequence factor, isolated from
PT
     CaMV 35S promoter.
XX
PS
     Claim 1; Fig 2; 8pp; English.
XX
CC
     The sequence represents nucleotides -90 -> -50 of the CaMV 35S
CC
                The binding site for the AFS-1, a protein isolated from
     promoter.
CC
     aetiolated peas, has been localised to a 21 bp sequence which
     includes the two pentanucleotide repeats. Studies of deletion and
CC
     subtitution mutants revealed that binding is abolished by mutation
CC
CC
     of these repeats but is unchanged or enhanced by mutation of the two
```

CC CAAT boxes. The promoter sequence enhances expression of genes in roots and can used to alter the specificity of other plant promoters. CC Insertion of the sequence at posn. -55 of the RUBISCO 3A promoter (specific for green tissue) or introduction by mutation in this region causes substantial expression in roots. CC See also AAQ12194 and AAQ12195.

XX

SQ Sequence 40 BP; 12 A; 13 C; 7 G; 8 T; 0 other;

SUMMARIES

Result			ુ Query				
1(0,	No.	Score	_	Length	DB	ID	Description
	1	28	100.0	28	6	AX207054	AX207054 Sequence
	2	28	100.0	50	6	AX026712	AX026712 Sequence
	[′] 3	28	100.0	98	6	AR130348	AR130348 Sequence
	4	28	100.0	98	6	E13108	E13108 35S promote
	5	28	100.0	102	6	AR130349	AR130349 Sequence
С	6	28	100.0	102	6	AR130350	AR130350 Sequence
	7	28	100.0	102	6	E13109	E13109 Plant promo
С	8	28	100.0	102	6	E13110	E13110 Plant promo
	9.	28	100.0	113	6	AR084230	AR084230 Sequence
	10	28	100.0	113	6	I90373	I90373 Sequence 17
С	11	28	100.0	117	6	AR084231	AR084231 Sequence
С	12	28	100.0	117	6	190374	I90374 Sequence 18
	13	28	100.0	174	8	AF434749	AF434749 Zea mays
	$\frac{14}{15}$	28	100.0	189	6	AX164073	AX164073 Sequence
C	15	28	100.0	197	8	AF434747	AF434747 Zea mays
C	16	28	100.0	198	6	AX207117	AX207117 Sequence
	17	28	100.0	199	8	AF434746	AF434746 Zea mays
	18	28	100.0	199	8	AF434748	AF434748 Zea mays
С	19	28	100.0	199	8	AF434750	AF434750 Zea mays
	20	28	100.0	206		AX247517	AX247517 Sequence
	21	28	100.0	210	14	S51061	S51061 35S {promot
	22 23	28	100.0	240 309	6 6	AX033493 AX044092	AX033493 Sequence
		28	100.0			AX207114	AX044092 Sequence
	24 25	28 28	100.0	314 331	6 6	BD001990	AX207114 Sequence BD001990 A transge
	26	28	100.0	332		E01311	E01311 Cauliflower
	27	28	100.0	333		104847	I04847 Sequence 3
	28	28	100.0	348	6	AX207116	AX207116 Sequence
	29	28	100.0	354	12	ARCAMVPR	X04879 CaMV promot
С	30	28	100.0	390	12	SC0308514	AJ308514 Synthetic
C	31	28	100.0	392		AX207113	AX207113 Sequence
_	32	28	100.0	413	6	AX207113	AX207113 Sequence
С	33	28	100.0	423	14	CMV7626	AJ007626 Culiflowe
_	34	28	100.0	439	6	A41016	A41016 Sequence 3
	35	28	100.0	439	6	AR082579	AR082579 Sequence
	36	28	100.0	439	6	I28254	I28254 Sequence 3
	37	28	100.0	446		A78762	A78762 Sequence 23
	38	28	100.0	446		AR014735	AR014735 Sequence
	39	28	100.0	470	6	AX026717	AX026717 Sequence
	40	28	100.0	480	12	SYNCAMVCM5	M74305 Synthetic e
С	41	28	100.0	485	$\frac{14}{14}$	CMV7625	AJ007625 Cauliflow
	42	28	100.0	532	6	AR110594	AR110594 Sequence
	43	28	100.0	532	6	AR150993	AR150993 Sequence
	44	28	100.0	532		AR152416	AR152416 Sequence
	45	28	100.0	532		AR152425	AR152425 Sequence
							-